

"Milk is white blood." The oldest individuals I have known, have lived principally upon milk diet. Second childhood may be treated much in the way as directed by the late Dr. James Hamilton, Professor of Midwifery in the University of Edinburgh: "Plenty of milk, plenty of flannel, and plenty of sleep or rest."—*Lancet*, April 26, 1856.

7. *On Treatment of Fever by Large and Frequently Repeated Doses of Quinine.*—Contradictory reports have been made by different practitioners as to the success attending Dr. Dundas's mode of employing quinine in the treatment of fever, and with a view of contributing to the establishment of the truth Dr. THOMAS B. PEACOCK has reported (*Med. Times and Gaz.*, Jan. 12 and 19, 1856) the results which he has obtained from the quinine treatment as employed in St. Thomas's Hospital, and compared the average mortality and duration of the cases in which it was administered, with the similar facts as to those in which the more ordinary treatment was had recourse to.

"On referring," he states, "to the hospital records, I find that during the present year, from January to October inclusive, there were treated in St. Thomas's, 139 cases of fever of all kinds, excluding the cases entered as febricula and ephemera. Of the 139 cases, 20 were subjected to the quinine treatment. In one case, 4 grains of the drug were given every two hours; in a second, 5 grains were exhibited three times daily; in a third, 5 grains were administered every three hours; in four others, 5 grains every four hours; in two, 6 grains every three and every six hours; in two, 8 grains every four hours; in two, 10 grains every two hours; in three, 10 grains every six hours; and in one, 15 grains every six hours. In three cases (one male and two females), the remedy was only given in doses of 2 grains three times daily. In six of the cases, the exhibition of the quinine was commenced on the day of the patient's admission into the hospital; in eight, on the following day; in one, on the third day; and in one, on the fifth day from admission. In one case, in which the patient took fever in the hospital, the precise period of the disease at which the quinine treatment was commenced, is not stated, but it may be inferred not to have been later than the third or fourth day. In all the cases, stimulants and support were had recourse to, as required. Of the twenty patients, fifteen were males, and five females; the respective proportions of the sexes being 75 and 25 per cent.

"The mean age was in males,	24.1;	the extremes, 17 and 35
"                  " females,	20;	"                  14 and 29
"                  " both sexes,	23.4.	

"The mean period of admission was in males,	9 days.
"                  " females,	10 "
"                  " both sexes,	9.1.

"Deducting the three cases in which small doses only were given, the mortality was—

In males, 2; in females, 1; or,	
In males . . . . .	14.2 per cent.
females . . . . .	33.3 "
both sexes . . . . .	17.6 "

"The mean period of residence of the cases cured, excluding those in which small doses only were given, and one case detained in hospital eighty-four days, from accidental circumstances, was—

In males . . . . .	28.7 days.
females . . . . .	20.5 "
both sexes . . . . .	29 "

"During the same period of nine months there were, as before stated, 119 other cases of fever treated in the hospital. In some of these cases, little else was given than soda water, and suitable support and stimulus. In others, the treatment consisted in the exhibition of chlorate of potash, dissolved in water or decoction or infusion of bark, with or without hydrochloric acid, in doses of 8

or 10 grains, every two or three hours. In yet other cases, the sesquicarbonate of ammonia, in doses of 5 to 8 grains, was given in infusion of serpentary or decoction of bark at intervals of 2 to 4 hours; this treatment being commenced either at an early period of the disease, or towards its termination. In both these sets of cases, diffusible stimulus and support were also given, according to the amount of prostration.

"Of the 119 cases, 73 were males, and 46 were females, being respectively 61.3 and 38.6 per cent.

"The mean age of the patients was—

In males,	24.5 ; extremes, 4 and 72
females,	24 ; " 5 and 58
both sexes,	24.4

"The mean period of admission was—

In males	. . . . .	10.4 days.
females	. . . . .	9.5 "
both sexes	. . . . .	10.2 "

"The mortality was in males, 10; in females, 5; or,

In males	. . . . .	13.6 per cent.
females	. . . . .	10.8 "
both sexes	. . . . .	12.6 "

"The mean period of residence of the cases cured (deducting those detained in the hospital from accidental causes), was—

In males	. . . . .	27.2 days.
females	. . . . .	29.8 "
both sexes	. . . . .	28.1 "

"It will be seen, on comparing these two series of observations, that they bear a very close general resemblance, as regards the circumstances which most materially affect the results of the treatment pursued; as the age and sex of the patients, and the period of the disease at which they were admitted into the hospital; indeed, in the last two particulars, the advantage was rather in favour of the cases treated by quinine. The two series may, therefore, be admitted as affording some test of the respective merits of the systems of treatment pursued; and it will be seen, that in the quinine cases the rate of mortality is considerably higher, and the durations of residence longer, than in others.

"It may, however, be objected that a calculation founded upon the respective duration of residence of the cases in hospital, does not afford a satisfactory standard of comparison, as being liable to be affected by accidental causes; and there can be no doubt of the truth of this remark. The period during which a patient is detained in bed, would, exceptional cases being omitted, afford more exact results; but the comparison of the periods at which the patients are regarded as free from fever, as adopted by Dr. Gee and Mr. Eddowes, or the period of convalescence, would be a still less satisfactory standard, because liable to greater variation from the views of different observers. In the calculations above given, I have endeavoured to guard against incorrect results, by excluding all cases detained for a longer period than usual, from casual circumstances.

"It may also be contended, that the number of cases in which the quinine treatment was had recourse to, was so small, that the inferences deduced from them cannot be depended upon. Admitting the force of this objection, I have collected all the cases in which the quinine treatment was employed in the Hospital during the year 1854. These I find amount to twenty in number, of which twelve were males and eight females; but two, one male and one female, took the remedy only in small doses. Deducting these, there remain eighteen cases in which the quinine was exhibited, in doses varying from 2 and 4 grains every four hours and three times daily, in boys of 8, 10, and 15 years of age, to 5, 8, and 10 grains every two, four, six, and eight hours, in adults. The remedy was commenced on the day of the patient's admission into the hospital in seven cases; on the following day, in five cases; on the third day, in three; the fourth, in one; and on the seventh, eighth, and ninth days from admission, also in one case each. The general circumstances of the cases were also more favourable

for treatment than either of the other two sets, the mean age of the patients being only 19.3, and the extremes 10 and 45; and the mean period of admission the sixth day of illness. The results were also more favourable both as regards the mortality, and the duration of the cases cured; the deaths being only two males; and the period of residence in the cases which recovered, only twenty-six days; deducting the three cases in which the quinine was not given till the seventh, eighth, and ninth days from the admission of the patients into the hospital, and in which the period of residence was twenty-seven, sixty-three, and sixty-nine days.

"Adding these two series of cases together, and deducting those in which the remedy was only given in small doses, we get a total of thirty-five cases treated by quinine; of these, twenty-five were males, of whom four died; giving an average mortality of 16.0 per cent.; and ten were females, of whom one died, or ten per cent.; or in the thirty-five patients of both sexes, the mortality was five, or 14.2 per cent.

"The mean period of residence of the cases cured, was, in twenty males (excluding the one detained eighty-four days), 27.9 days; and in six females (excluding the three in which the patients did not commence the remedy till the seventh, eighth, and ninth days from their admission into the hospital), 25.3 days; or, taking the two sexes together, the mean period of residence of the patients was 27.3 days.

"It will thus be seen, on comparing these results as to the thirty-five cases treated by quinine with those obtained in the other 119 cases, that while the mortality in the quinine cases was considerably greater than in the others (1.6 per cent.), the mean period of residence of the cases cured under that treatment was very nearly the same as in the other cases (.8 less).

"This statement, embracing, as it does, so large a number of cases, including all those treated in the hospital by quinine during a period of nineteen months, and that, too, in the practice of different medical men, must, I think, be regarded as affording a fair indication of the results of the quinine treatment, and a legitimate comparison with that of the other methods. There do not appear any circumstances which should affect disadvantageously the results in the quinine cases; indeed, the general characters of the cases so treated are rather more favourable for treatment than those in which the more ordinary plans were pursued. If, therefore, quinine really possessed the power of cutting short an attack of fever, without reference to its particular type or form—and such is distinctly the assertion of Dr. Dundas—the average duration of the cases cured under that treatment, and their mean mortality, should be less than those under the ordinary plans; and if such does not prove to be the case, the fair inference is, that the remedy does not possess the asserted power.

"It is, however, quite possible that, though the quinine treatment may fail to exhibit satisfactory results, when applied to all the cases which occur, taken indiscriminately, without reference to their peculiar character; when applied to a more select set of cases, it may prove to be capable of arresting some of them, or, at least, of materially mitigating their severity."

Dr. Peacock gives the details of seven cases of fever in which he made use of the remedy with a view of ascertaining by direct observation, how far it possesses the asserted power of arresting fever, or of proving, when exhibited in large and frequently repeated doses, a useful auxiliary to the employment of other means.

"In all these cases the most marked effect produced by the large doses of quinine was the depression of the power and frequency of the pulse. In one case the beats were only 48 in the minute on the fourth day after the commencement of the remedy, and when sixteen 10-grain doses had been exhibited; and, in this instance, the only other effect produced by the drug was slight frontal headache, and singing in the ears, and the patient steadily improved during its employment. In two cases the torpor and depression of strength increased under the use of the remedy; but, as these symptoms subsided, while it was still persevered in, it is not clear whether they should be ascribed to the action of the quinine or to the natural progress of the disease. In one case only was there more than transient headache or vertigo from the

use of the remedy; and this was also the only case in which there was very marked tinnitus aurium. In one case there was decided deafness, but, in this instance, the hearing was impaired from the time of the patient's admission. In one of the only two cases in which vomiting occurred, an emetic had been given at the commencement of the treatment. In one case the diarrhoea, previously present, was considerably aggravated under the use of the quinine."

The general results of the treatment may be stated as follows:—

"1. In one of the cases of typhus, the quinine was certainly not productive of any benefit, and probably added to the torpor and depression of strength. In the other case of typhus it produced the most marked depression, and the patient was only saved by its discontinuance and the liberal exhibition of stimulants. In both cases, though the patients recovered, the disease seemed to follow its natural course, and to be in no degree curtailed in duration by the exhibition of the remedy.

"2. In one case of typhoid, the depression of power and torpor increased under the use of the quinine, but the notes are too imperfect to allow me to speak confidently as to its effects. The patient recovered after an illness of average duration.

"3. In two other cases of typhoid, the remedy appeared to exert neither beneficial nor injurious effects; the disease followed its usual course, and the patients recovered.

"4. In another case of typhoid, it certainly added to the torpor and depression. The remedy was only exhibited in small doses, and for a short period, and was entirely discontinued after six doses had been given, in the course of a day and a half, and stimulants and other means were then freely had recourse to; the prostration and torpor, however, increased, and the patient died comatose.

"5. In the fifth case of typhoid, in which the affection was combined with bilious complication, the quinine was decidedly beneficial, the patient steadily improving under its use. The attack was certainly of shorter duration and less severity than might have been expected from the urgency of the symptoms when the treatment was commenced; but, in this case, the amendment was gradual, and no sudden improvement in the symptoms at any time occurred.

"In all the cases the patients had stimulus and support as required, and other accessory treatment, such as astringents, aperients, and anodynes, etc. While also the quinine was exhibited in the various cases in different doses and at various intervals, the different results bore no relation to any of these circumstances.

"The facts and observations which I have now related must only be regarded as a contribution towards the solution of the question of the usefulness of large and repeated doses of quinine in the treatment of the continued fevers of this country. So far, however, as they go, they are opposed to the views of Dr. Dundas, that quinine possesses the power of cutting short the attack; on the other hand, they indicate that the remedy is, in some cases, beneficial; but only as an auxiliary to other measures. It remains to decide, by more extended observations, in what forms of fever, and under what peculiar circumstances, local and individual, the remedy may be advantageously employed; and whether the quinine is more useful in moderate doses at distant intervals, or in the large and frequently repeated doses which have been recommended."

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8. *Bronzed Skin and Disease of the Supra-Renal Capsules.*—In our last number (p. 489 *et seq.*), we noticed the connection which has recently been pointed out as existing between bronzed skin and disease of the supra-renal capsules. Mr. JONATHAN HUTCHINSON has given (*Med. Times and Gaz.*, March 8, 1856), in a tabular form, the prominent characters observed in twenty-seven cases, and which tend very conclusively to support the opinion that the peculiar bronzing of the skin is really indicative of a fatal cachexia, and of organic disease of the supra-renal capsules:—